DECLASON FORMAN

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relationship of said leading edges of said first and second signals; [and]

means for discarding a measure of said measuring means when said temporal relationship of said trailing edges fails to conform with said temporal relationship of said leading edges; and

gating means coupled to a memory and said trailing edge circuit for reading out data relating to said leading edges from said comparing means when the data conforms to a temporal relationship signaled by said trailing edge circuit.

(Amended) A delay measurement circuit according to Claim 2 further comprising a memory coupled to said delay measurement means for recording said temporal relationship between said leading edges to permit a subsequent comparison of said temporal relationship of said leading edges with said temporal relationship of said trailing edges and a discarding of a delay measurement of data not conforming within a predetermined signal period.

## REMARKS

(U)Applicant respectfully requests reconsideration of Claim 1 rejected under 35 USC 112 as lacking an antecedent for "said memory in said trailing...circuit" and for "said temporal... signal" in lines 18 and 19. Applicant submits that, as amended, Claim 1 calls for the memory to conform to "a temporal relationship signaled by said trailing edges circuit" as suggested by the Examiner and by changing "in" to "and said trailing edge circuit".

(C)Applicant respectfully requests reconsideration of Claims 1-3 rejected under 35 USC 103 on the basis that the output of the





FIG. 7 circuit could be used to inhibit gate 4 of FIG. 1 to prevent read out of erroneous indications. Applicant submits that Pignard et al does not teach the comparison of a temporal relationship between the leading and trailing edges of two signals of Applicant's invention for measuring the angle of orientation of an incident wave formed of the first and second channels. To achieve this, the comparison is made by "a memory coupled to the leading edge circuit for storing data of the leading edges" as called for in Claim 1, and reading out data when data stored in the memory conforms to a "temporal relationship" signaled by the trailing edge circuit. Applicant's circuit employs a memory for this comparison. On the other hand, the phase measuring circuit of Pignard et al '104 does not provide this defined measurement. There is no teaching anywhere in Pignard et al that merely connecting his output 36 of FIG. 7, as suggested by the Examiner or as taught by Applicant, will achieve Applicant's novel wave measurement, particularly when Applicant utilizes a memory for the comparison of the temporal relationship of leading and lagging edges and signaling of the relationship of the trailing edges of the first and second signals, as now defined in the claims. Indeed, it is doubtful as to how such connection could be made to achieve Applicant's novel directional feature in as much as there is no teaching in the referenced patent as to the manner in which his gating structure could be connected. Accordingly, Applicant's claims, as now amended, with respect to defining connections regarding his memory and the angular measurement of incoming waves by reading out data when the temporal relationship of the trailing edge circuit conforms to the temporal relationship of the leading edges as recorded in the memory, are considered to be patentable over Pignard et al.



Claim 1 has been further amended to define its use as an angular measurement device. As now amended, Claim 1 is considered to be in condition for allowance.

Claim 2 has been amended to cure any incompleteness with respect to the determination of the temporal relationship of leading and lagging edges of the signals. As now amended, Claim 2 and dependent Claim 3, define structure for performing Applicant's novel signal measurement by counting to provide a digital number indicative of phase shift and entrance angle of the input waves.

The patent to Masters is noted. It does not teach nor disclose Applicant's novel measurement system which operates in connection with the temporal relationship as signaled by the trailing edge circuit. Nor, as noted, do the patents to Tatge et al and Warner disclose such relationship in an angular measurement system.

For the above reasons, Claims 1-3, as amended, are now believed in condition for allowance and such allowance is respectfully requested.

Respectfully submitted,

For the Applicant

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